

716 REPAIR-REPLACE PCC SUBSTRUCTURE (Over Two Inches in Depth)

716.01 GENERAL

The work for Repair-Replace PCC Substructure (Over Two Inches in Depth) shall consist of cutting out deteriorated or unsound concrete in those areas shown on the plans and/or as directed by the Engineer, removal and disposal of this material and replacing with Portland Cement Concrete to the lines and grades shown on the plans or as directed by the Engineer. Any exposed reinforcing steel which is to be left in place shall be sandblasted to bright metal.

716.02 MATERIALS

Epoxy Resin Adhesive - 821.10(B)(1)

Portland cement concrete - 817, Class B

Aggregates - 803

Reinforcing steel - 812.02

716.03 CONSTRUCTION REQUIREMENTS

Work performed under this section shall conform to the applicable requirements under 703 and as specified herein. The limits of the repair areas shall be saw cut along neat lines to a depth of at least 1/2 inch. The defective areas to be repaired shall be prepared by removing and disposing of all defective and deteriorated material down to sound concrete. Deteriorated or damaged reinforcing steel shall be replaced as directed by the Engineer. New reinforcing steel shall be paid for in accordance with 704. The surfaces against or on which new concrete is to be placed shall be blown clean with oil-free and clean air so as to be clear of all loose material, dust, dirt, grease, etc. These surfaces shall be thoroughly wetted just prior to being coated with epoxy resin adhesive and depositing fresh concrete against or on them. Epoxy adhesive shall be applied by brush or roller at the spreading rate of 40 square feet per gallon on moderately rough surface to 25 square feet per gallon on very rough surface. The adhesive shall be applied when the ambient air temperature is in excess of 60°F unless otherwise recommended by the manufacturer. The fresh concrete shall be placed against or on the adhesive coating while the epoxy adhesive is still tacky. Portland cement concrete shall be proportioned, mixed, placed, finished and cured in conformance with the requirements in 703.

716.04 MEASURE AND PAYMENT

The unit of measure for Repair-Replace PCC Substructure (Over Two Inches in Depth) will be the square yard. The number of square yards will be the actual number of square yards, measured complete in place.

Payment for Repair-Replace PCC Substructure (Over Two Inches in Depth) will be made at the contract unit price per square yard, which payment will include all costs for removal and disposal of all old materials (including reinforcing steel), sandblasting, cleaning, and wetting the existing concrete surfaces and furnishing and applying epoxy resin adhesive. Also included will be all the labor, materials (except for reinforcing steel), tools, equipment and incidentals necessary for proportioning, mixing, placing, finishing and curing the new concrete.